

USSR / Human and Animal Morphology (Normal and Pathological).
Nervous System. Central Nervous System.

S

Ats Jour : Ref Zhur - Biologiya, No 9, 1958, No. 40779

complex manner in all its parts. Argyrophil spheres are not specific for Pick's disease, and excessively swollen cells with homogenization of the protoplasm were demonstrated in all cases in the cortex as well as in the optic thalamus. It is underscored that Pick's disease represents by itself a disease of the whole B and apparently, of the whole organism. The character of the changes of the nervous cells, of the glia and particularly of the MF in the absence of patches of senile dementia and Alzheimer changes of neurofibrils, give basis to exclusion of the given illness from the group of senile psychoses. -- A. M. Vikhert

Card 2/2

TSIVIL'KO, V.S.

Bathomorphological data on cerebral vascular disorders in schizophrenia [with summary in French]. Zhur.nevr. i psikh. 28 no.9
1118-1129 '58 (MIRA 11:11)

1. Otdel morfologii (sav. - prof. A.P. Avtsyn) Instituta psikhiatrii
(dir. - prof. V.M. Banskchikov) Ministerstva zdравookhraneniya RSFSR,
Moskva.

(SCHIZOPHRENIA, pathology,
cerebral vasc. lesions (Rus))

TSIVILKO V. S.
EXCERPTA MEDICA Sec 20 Vol. 1/3 Geriatrics Sep 58

523. *Pathological morphology of Pick's disease (Russian text)* TSIVILKO V. S. *Zh. Neuropat. Psikhiat. (Mosk.)* 1957, 57/4 (534-541) Illus. 6

Three female patients between 21 and 64 yr. of age and with a duration of illness of 2 yr. were examined. Atrophic changes were not only observed in the cerebral cortex, but also in the white substance, subcortical ganglia, cerebellum and medulla oblongata. Particularly characteristic was the marked enlargement of the neurons of the 5th layer of the cortex, whereas changes of the other neurons were not present. All these proliferations were accompanied by marked proliferation of the astroglia and microglia. Senile plaques or neurofibrils were not found.

Dimitrijević - Sarajevo (VIII, 20)

TSIVIL'KO, V.S.

Role of morphological data in the diagnosis of schizophrenia [with summary in French]. Zhur.nevr. i psikh. 58 no.4:471-476 '58 (MIRA 11:5)

1. Gistopatologicheskaya laboratoriya (nauchnyy rukovoditel' - prof. P. Ye. Snesarev [deceased] Instituta psikhologii Ministerstva zdravookhraneniya RSFSR, Moskva.
(SCHIZOPHRENIA, pathol.
systemic histopathol., diag.value (Rus))

TSIVIL'KO, V.S.

Pathoanatomical changes in the brain and internal organs in true
uremia. Zhur.nevr. i psikh. Supplement:95-96 '57. (MIRA 11:1)

1. Gistopatologicheskaya laboratoriya (zav. - prof. P.Ye.Snesarev)
Instituta psikhiatrii Ministerstva zdravookhraneniya RSFSR, Moskva.
(UREMIA) (BRAIN--DISEASES) (VISCERA--DISEASES)

TSIVIL'KO, V.S.

Pathomorphology of Pick's disease [with summary in French]. Zhur.
nevr.i psikh. 57 no.4:534-541 '57. (MLRA 10:7)

1. Gistopatologicheskaya laboratoriya (nauchnyy rukovoditel' - prof.
P.Ye.Snesarev [deceased]) Gosudarstvennogo instituta psikiatrii
Ministerstva zdavookhraneniya RSFSR (dir. - prof. V.M.Banshchikov)
(PSYCHOSES, PRESENILE, pathology.
Pick dis. (Rus))

LAVROV, V.V.; ARKHANGEL'SKAYA-LEVINA, M.S.; FEDOROV, D.N.; IOSSET, G.Ya.;
SOSNYAKOV, N.G.; BERINGER, Yu.V.; KOZACHINSKIY, R.M.; YELETSKAYA,
O.I.; GOSHKINA, A.I.; MIKLASHEVSKAYA, A.V.; ZYKOV, A.A.; LEBEDEV,
M.F.; DERGUNOVA, K.S.; RYTSK, Z.A.; FRENKINA, D.Z.; TSIVIN, S.S.

In memory of A.M.Zabludovskii. Khirurgia no.12:74-75 D '53.
(MLRA 7:1)

(Zabludovskii, Anton Martynovich, 1880-1953)

ASKALONOV, I.N., prof.; TSIVINA, D.V., kand.med.nauk

Penicillin therapy in experimental penetrating gunshot wounds
of the knee joint. Voen.med.zhur. no.2:49-52 P '58. (MIRA 11:4)

(KNEE, wounds and inj.

exper., eff. of penicillin in dogs)

(PENICILLIN,

on knee joint wds. in dogs)

SOV/177-58-2-8/21

17(12,14)
AUTHORS:

Askalonov, I.N., Professor, and Tsivina, D.V., Candidate of Medical Sciences

TITLE:

Penicillin Therapy for Penetrating Gun-Shot Wounds to the Knee Joint in an Experiment

PERIODICAL:

Voyenno-meditsinskiy zhurnal, 1958, Nr 2, pp 49-52 (USSR)

ABSTRACT:

In the introduction, the authors deal briefly with the use of antibiotics in the treatment of gun-shot wounds to the knee joint, and problems connected therewith. The article is devoted to the description of an experiment performed by the authors on 3 groups of mature dogs, 40 in all. Each dog received a bullet wound from a small calibre rifle in the knee joint of one hind leg. A staphylococcus culture with 1 - 2 billion microbes was introduced into the wound, followed, in all but one, the control, group, by 50,000 units of penicillin in a 1/2% solution of novocain. Similar doses of antibiotics were introduced twice daily for a period of one week. The text gives detailed descriptions of the treatment given each group of dogs, both surgical and antibiotic,

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SOV/177-58-2-8/21

Penicillin Therapy for Penetrating Gun-Shot Wounds to the Knee Joint in an Experiment

and the results of this treatment. Best results - 11 out of 14 regained full use of the joint, 2 had only slight restrictions - were obtained in group 2, which received injections of penicillin into a sealed joint cavity. Sealing of the cavity allowed the antibiotic to maintain a high degree of concentration. The authors conclude that the system of complex therapy described deserves wider use in clinical practice. The following persons are mentioned in the text: Roze, Napalkov, Mukhamedbekov, Yelanskiy, Bogatyrev, Banaytis, Yeolyan, Diterikhs, Lebedeva, Serzhanin, Stanislavskaya.

Card 2/2

Tsivina, D. V.

USSR / Pharmacology, Toxicology. Chemotherapeutic Agents.

U-7

Abs Jour : Ref. Zh.-Biol., No 2, 1958, No 8132

Author : Askalonov, I. N., Tsivina, D. V.

Inst :

Title : An Intra-arterial Injection of Antiseptics and Antibiotics in the Treatment of Experimentally Infected Wounds in the Soft Tissues of the Extremities.

Orig Pub : Tr. Kuybyshevsk. Med. in-ta, 1954, 5, 236-241.

Abstract : Favorable prophylactic and therapeutic effects of intravenous infusions of penicillin with sodium sulfathiazole and ~~cef~~penicillin with novocaine have been demonstrated in the treatment of infected soft tissue wounds.

Card : 1/1

1ST AND 2ND ORDERS																										PRECEDENCES AND PROPERTIES INDEX																									
<div style="float: left; width: 10%; font-size: 2em;">C</div> <div style="float: right; width: 10%; font-size: 2em;">7</div> <div style="clear: both;"></div> <p style="text-align: center;">A rapid method for determining sulfates. Gorman and Tsivina. <i>Novoe i Praktika Hidrogenizatsii Zhiror</i>, <i>Sbornik Vsesoyuz. Nauch.-Issledovatel. Inst. Zhiror</i> 1939, 127-9; <i>Khim. Referat. Zhur.</i> 1940, No. 3, 55.—For detg. sulfates in Ni catalysts G. and T. propose to measure the BaSO_4 ppt. in a graduated centrifugal tube. W. R. Henn</p>																																																			
<div style="display: flex; justify-content: space-between;"> <div> <p>COMMON ELEMENTS</p> <p>OPEN</p> <p>MATERIALS INDEX</p> </div> <div> <p>ADVANCE INDEX</p> </div> </div>																																																			
<p style="text-align: center;">ASB-SLA METALLURGICAL LITERATURE CLASSIFICATION</p>																																																			

BC

Modification of Kozluch's method for determination of arsenic in sulphuric acid. A. A. VASILYEV and B. S. TAYINA (Zavod. Lab., 1954, 3, 314-315).—25 ml. of H_2SO_4 and 5 ml. of 5% KI are added to 200 ml. of H_2O , the solution is boiled for 5 min., diluted to 400 ml., 0.1N- $Na_2S_2O_3$ is added to disappearance of I, the solution made faintly alkaline with 2% NaOH, 0.25 ml. of conc. HCl added, and 1 g. more of $NaHCO_3$ then is necessary to neutralize the HCl, when the solution is titrated with 0.1N-I (1 ml. = 3.746 mg. As).

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H. T.

PROCESSING AND PROPERTY INDEX																									
1ST AND 2ND COLUMNS													3RD AND 4TH COLUMNS												
<p><i>Regeneration of used catalyst. P. A. Tsvetkov and G. A. Ivanov. Nauch. i Prikladn. Khim. Zhurnal (Leningrad) 1939, 95-7; Khim. Referat. Zhur. 1940, No. 4, 107. Expts. were carried out to improve regeneration of the Cu-Ni catalyst for a max. extn. of Cu and Ni. Treat the catalyst with hot water, mix with live steam at 90°, add 2% NaOH and 4% of kiesigubr, oxidize for 60 min. with a soln. contg. 30-40 g./l. of active Cl and heat at 100° with an excess of 15-20% H₂SO₄. This gives satisfactory results under plant conditions. W. R. Hens</i></p>																									
<p>ASR-51A METALLURGICAL LITERATURE CLASSIFICATION</p>																									
1ST COLUMN													2ND COLUMN												
3RD COLUMN													4TH COLUMN												

TSIVINDO, A. Z.

USSR / Cultivated Plants. Fruits, Berries. - 1.

Abs Jour : Ref Zhur - Biol., No 8, 1958, No 34792

Author : Tsivindo, A. Z.

Inst : ~~Institute for Agriculture~~, Branch of VASKHNIL

Title : Results of Fertilization Tests with Fruit Trees
in the Zone of Cultivation of Alma-Ata.

Orig Pub : Tr. in-ta zool. Kazakhst. fil VASKhnil, 1956, 5,
93-115

Abstract : Experiments conducted by the Institute in 1933-
1954 on dark brown soils, have shown that spread-
ing of K and P_s in the form of organic mineral
granules does not increase the crop, while adding
of K improves the growth and increases the crop.
The best effect was obtained with simultaneous
spreading of mineral and organic fertilizers at

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USSR / Cultivated Plants. Fruits, Berries.

Abs Jour : Ref Zhur - Biol., No 8, 1953, No 34792

the time the fruits are picket-tied, prior to the picking of the fruit buds and in the period of increased fruit growth. The most favorable dosages in young gardens are: M90, P90, K45, in fruit-bearing gardens, and M180-240 and PK in smaller quantities. -- Fortunatov.

Card 2/2

ACC NR: AT6034481

SOURCE CODE: UR/0000/66/000/000/0134/0139

AUTHOR: Tsivinskiy, S. V.

ORG: Leningrad Physico-technical institute im. A. F. Ioffe (Leningradskiy fiziko-tehnicheskii institut)

TITLE: Growing germanium crystals by A. V. Stepanov's technique

SOURCE: Rost i nesovershenstva metallicheski kristallov (Growth and defects of metal crystals). Kiev. Naukova dumka, 1966, 134-139

TOPIC TAGS: germanium, semiconductor single crystal, single crystal growing, germanium single crystal, web crystal

ABSTRACT: A technique was described of growing germanium web single crystals by pulling from germanium melt through an immersed shot under 5—6 g/cm² pressure. Germanium web crystals up to 150 mm long were grown without adding Ge during the growth process. Stability of the growth process was achieved by the use of a special form of shot which produced a web crystal with thicker edges (fillet region). The total width and thickness of the narrow web crystals were ~13 mm and 0.17—1.1 mm, respectively, and of the wide web crystals ~27 mm and 0.27 mm, respectively. Some of the web crystals had a nearly mirror-bright surface. The crystals with uniform distribution of impurities and, in certain instances, with a fairly uniform dislocations' density were obtained by the technique, which is known by the name of A. V. Stepanov. Electric resistivity of a web crystal varied within ±3—15% and density

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ACC NR: AT6034481

of dislocations in certain web crystals varied within the limits permissible in the crystals for use in semiconductor devices. The Stepanov technique was thought to be one of the most controllable methods of growing thin, long web crystals for semiconductor devices. The production process of these devices may be simplified and its automation may be facilitated by application of the Stepanov technique. Orig. art. has: 6 figures.

SUB CODE: 11, 20/ SUBM DATE: 22Jun66/ ORIG REF: 005/ OTH REF: 002/

Card 2/2

TSIVINSKIY, S.V.; STEPANOV, A.V.

Growing germanium single crystals of a specified shape. Fiz. tver.
tela 7 no.1:194-199 Ja '65. (MIRA 18:3)

1. Fiziko-tekhnicheskii institut imeni Ioffe AN SSSR, Leningrad.

TSIVINSKIY, S.V.; STEPANOV, A.V.

Determination of the orientation of germanium crystals using an optical method. Zav.lab. 29 no.11:1333-1335 '63. (MIRA 16:12)

1. Leningradskiy fiziko-tekhnicheskii institut im. A.F.Ioffe AN SSSR.

L 16002-66 EWT(1)/EWT(m)/ENP(b)/T/ENP(t) IJP(c) GG/JD

ACC NR: AT6002271

SOURCE CODE: UR/2564/65/006/000/0355/0359

AUTHOR: Tselvinskiy, S.V.

ORG: none

TITLE: Preparation of crystals by A.V. Stepanov's method. (Paper presented at the Third Conference on Crystal Growing held in Moscow from 18 to 25 November, 1963.)

SOURCE: AN SSSR. Institut kristallografi. Rost kristallov, v.6, 1965, 355-359

TOPIC TAGS: single crystal growing, germanium single crystal

ABSTRACT: The method of Prof. A.V. Stepanov, used for growing single crystals and polycrystals, was applied to the growing of germanium crystals. It involves the utilization of phenomena associated with the presence of a column of melt behind a solid rod being pulled out of a liquid, and is thus a development of the Czochralski method. Germanium crystals were obtained in the form of a thin ribbon by pulling from a slit. The resistivity and dislocation density were measured along the length and width of the germanium ribbon obtained. It was found that A.V. Stepanov's method can be used to obtain germanium crystals of predetermined shape, size and crystallographic orientation. The ribbon crystals have uniform electric properties and in many cases a fairly uniform

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L 16002-66

ACC NR: AT6002271

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distribution of dislocations. The possibility of growing thin and long ribbon crystals which in thickness and properties are similar to crystals employed in semiconductor devices simplifies the process of production of such devices and facilitates its automation. In conclusion the authors thanks Prof. A.V. Stepanov for valuable suggestions and fruitful discussions. Orig. art. has: 7 figures.

SUB CODE: 20 / SUBM DATE: none / ORIG REF: 005 / OTH REF: 002

Card 2/2 *SD*

VOLOKH, D.M.; TSIVINSKIY, Ye.Y. [TSyvins'kyi, IE.I] (Poltava)

Prevention and treatment of terminal states in obstetrics and
gynecology. Ped., akush. i gin. 24 no.1:45-46'62.(MIRA 16:8)
(DEATH, APPARENT) (HEMORRHAGE, UTERINE)

SOV/163-59-1-49/50

18(3)

AUTHORS:

Natapov, B. S., Tsivirko, D. Ia., Pal'kevich, E. S.

TITLE:

Influence of Several Factors Upon the Quality of Automobile Plate
(Vliyaniye razlichnykh faktorov na kachestvo avtomobil'nogo lista)

PERIODICAL:

Nauchnyye doklady vysshey shkoly. Metallurgiya, 1959, Nr 1,
pp 254-258 (USSR)

ABSTRACT:

In order to determine the deep drawing quality of 08kp VGV steel sheet the influence of the physical and mechanical properties upon the quality of the products was investigated by making a direct study of the deep drawing process for which methods of statistical analysis were applied (Refs 1,2). This statistical analysis rested on the tests of the physical and mechanical properties of 630 lots of the steel sheet in question. The experiments were carried out in the laboratory of the Gor'kovskiy avtozavod (Gor'kiy Automobile Works). This article presents the results of the statistical analysis in a table exposing the dependence of the percentage of substandard products upon the characteristics of the metal. A linear relationship was found to exist between the amount of substandard products caused by fissures in the sheet, and the physical and mechanical properties. The information collected indicates that none of these properties exercises a dominating

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SOV/163-59-1-49/50

Influence of Several Factors Upon the Quality of Automobile Plate

influence. A relatively insignificant interdependence between the amount of substandard products in deep drawing and the grain size of the ferrite and the inclusions containing structureless zementite was established. The low correlation coefficient is explained. The results of these investigations permit to make the statement that metallurgists should strive to produce a metal with uniform properties through one sheet and through one series and with a minimum number of cracks. As hitherto only very insufficient methods have been known of determining the yield point and the hardness the authors tried to investigate these characteristics by measuring the coercive force and thus found out that these two properties take a largely parallel course. Hence the usual measuring methods can be supplanted by a measurement of the coercive force. The mechanical properties of steel sheet can be improved by a larger grain size, by removing non-metallic inclusions, by a prevention of zementite formation and by a reduction of the sulphur content. The annealed sheets are dressed in order to improve the surface quality of automobile parts. By the specifications of the "Zaporozhstal'" Works the reduction in height by dressing is set to 0.8 - 1.5 %. The investigation of the rules governing the aging of 08kp steel after deformation showed that the hardness during aging increases the

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SOV/163-59-1-49/50

Influence of Several Factors Upon the Quality of Automobile Plate

more, the more nitrogen is contained in the steel. An increase of the aluminum content in the steel leads to a reduction of hardness during aging. A steel which has been deoxidized by aluminum shows a tendency towards aging if it contains ample amounts of oxygen. The microscopical investigation of samples destroyed at the temperature of liquid nitrogen showed that by aging the bonds at the grain boundaries are weakened. There are 1 table and 5 Soviet references.

ASSOCIATION: Zaporozhskiy mashinostroitel'nyy institut
(Zaporozh'ye Institute of Machine Building)

SUBMITTED: May 4, 1958

Card 3/3

TSIVINA, S.A., inzhener.

Size allowances for electroplating. Vest. mash. 35 no.9:67-68
S '55. (MLRA 9:1)
(Electroplating) (Machine-shop practice)

[illegible]

TSIVINSKIY, S.V.; KOGAN, L.I.; ENTIN, R.I., doktor tekhn.nauk

Investigating chromium and tungsten distribution during the process
of austenite dissociation using the radioactive isotope method. Probl.
metalloved. i fiz. met. no.4:277-295 '55. (MIRA 11:4)

(Steel alloys--Metallography) (Austenite)

(Radioisotopes--Industrial applications)

STEPANOV, A. V.; TSIVINSKIY, S. V.

Production and properties of germanium dendritic crystals.
Fiz. tver. tela 5 no.1:81-90 Ja '63. (MIRA 16:1)

1. Fiziko-tekhnicheskii institut imeni A. F. Ioffe AN SSSR,
Leningrad.

(Germanium crystals)

TSIVINSKIY, S.V.

Using the capillary phenomena theory in manufacturing articles with a predetermined shape directly from the melt by A.V.Stepanov's method. Inzh.-fiz.zhur. 5 no.9:59-65 S '62. (MIRA 15:8)

1. Fiziko-tekhnicheskii institut imeni A.F.Ioffe AN SSSR, Leningrad.
(Capillarity) (Founding)

44498

S/181/63/005/001/013/064
B102/B186

17 1500
AUTHORS:

Stepanov, A. V., and Tsivinskiy, S. V.

TITLE:

Production and properties of germanium dendrite crystals

PERIODICAL:

Fizika tverdogo tela, v. 5, no. 1, 1963, 81-90

TEXT: The possibility, which now exists, of building up complete radio circuits from small semiconductor crystals of different shapes and different orientations, and even of automating this production (Westinghouse Engineer, 19, 4, 113, 1959), lends great importance to the production of suitable crystals. Only two methods have hitherto been known: that of A.V. Stepanov (ZhTF, 29, 3, 381, 1959; 3, 394, 1959) and the method of dendrite crystallization developed in the U.S.A. This method has not hitherto been examined thoroughly as regards how production conditions affect the crystal properties. The factors influencing the shape, the electrical properties, and the dislocation distribution in dendrites are studied here. The dendrites were pulled from a melt in a crucible placed at the bottom of a quartz container, the crucible being constructed as an electric resistance furnace. The pressure in the

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see S/181/63/005/001/013/064

Production and properties of ...

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B102/B186

quartz container was 10^{-4} - $2 \cdot 10^{-5}$ mm Hg. After germanium had been melted it was overheated by $6-14^{\circ}\text{C}$, the furnace was then switched off and cooled at a rate of $1.2 - 1.6^{\circ}\text{C}/\text{sec}$. Until the pulling was begun the rate was $0.4 - 0.8^{\circ}\text{C}/\text{sec}$. The following factors and their effects on the crystallization were studied: shape of the crucible (effect on the form of the dendrites; formation of side branches); material of the crucible (effect on the type of growth, formation of side branches and nucleation probability); amount of germanium in the crucible (effect on the number of dendrites per seed), effect of overheating after melting (strong overheating ($45-85^{\circ}\text{C}$) leads to dendrite crystallization if the melt is undercooled about 5°C lower than after minor overheatings ($6-14^{\circ}$)); temperature of the introduction of the seed into the melt (this temperature should be somewhat lower than the melting temperature, otherwise polyhedra will be formed or formation of dendrite will be uncontrollable; degree of undercooling before dendrite pulling (strong undercooling (30°C) gives thick ($0.9-1.5$ mm) dendrites with poor faces; undercooling of $15-17^{\circ}\text{C}$ gives thin ($0.2-0.35$ mm) dendrites with good faces); temperature change of the melt during the crystal growth (effect on the constancy of the dimensions and the uniformity of the electrical properties). The

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Production and properties of ...

S/181/63/005/001/013/064
B102/B186

following electrical properties were studied: resistivity distribution, minority carrier diffusion length (l_d), longitudinal dislocation density. Germanium of the brand ГЭЛС (GELS) 40/2.5 and 3/0.7 was used as starting material. All dendrites studied showed strongly inhomogeneous characteristics; q and l_d , measured along the dendrite, showed a zig-zag course. The temperature of the melt influences not only the dendrite diameter but also q ; changes of $\approx 0.1^\circ\text{C}$ change q by some ohm·cm. The dislocation densities were 10^6 cm^{-2} or more; these also changed along the dendrites with strong fluctuations (1 to 4 orders of magnitude). There are 7 figures and 1 table.

ASSOCIATION: Fiziko-tekhnicheskiy institut im. A.F. Ioffe AN SSSR, Leningrad (Physicotechnical Institute imeni A.F. Ioffe AS USSR, Leningrad)

SUBMITTED: July 19, 1962

Card 3/3

L 06429-67 EWT(m)/EMP(t)/NTL/EMP(k) LIP(c) JD/WM/HN/JG

ACC NR: AP6026704

SOURCE CODE: UR/0181/66/008/008/2461/2462

AUTHOR: Tsivinskiy, S. V.; Koptev, Yu. I.; Stepanov, A. V. 28
BORG: Physicotechnical Institute im. A. F. Ioffe, AN SSSR, Leningrad (Fiziko-tekhnicheskii institut AN SSSR) 11TITLE: Growing of germanium tubes

SOURCE: Fizika tverdogo tela, v. 8, no. 8, 1966, 2460-2461

TOPIC TAGS: crystal growing, germanium single crystal 16

ABSTRACT: The method used for growing thin-walled germanium tubes is a modification of one described earlier by A. V. Stepanov (Budushcheye metalloobrabotki. Lenizdat, 1963). The seed (tungsten foil rolled into a tube and wetted by germanium) is immersed in molten germanium, then gradually pulled out of it (at a pulling rate of 60 mm/hr). Thanks to surface tension forces, a thin-walled tube builds up behind the seed. The temperature conditions are chosen such that the crystallization front is located slightly (1 mm) above the upper end of the rod. Thus, during the pulling, crystallization begins under conditions where thin-walled tubes about 1 cm in diameter can be grown onto the seed. In the cross section, one single-crystal grain frequently predominates over other single-crystal grains by displacing them during growth. In good specimens, the thickness of the tubes was 0.20 ± 0.3 mm. The length (90-100 mm) was determined by the performance of the pulling mechanism. Orig. art. has: 2 figures.

idh
Card 1/1 SUB CODE: 20 / SUBM DATE: 25 Jan 66 / ORIG REF: 002

Category : USSR/Solid State Physics - Phase Transformation in
Solid Bodies

E-5

Abs Jour : Ref Zhur - Fizika, No 3, 1957, No 6617

Author : Tsivinskiy, S.V., Kogen, L.I., Entin, R.I.

Title : Radioactive Tracer Investigation of the Distribution of
Chromium and Tungsten During the Process of Austenite Decay

Orig Pub : Probl. metalloved. i fiz. metallov, sb. 4, 1955, 277-295

Abstract : The method of radioactive isotopes was used to determine the contents of Cr and V in the carbide phase in steels with 1.18% C and 2.42% Cr and with 1.02% C and 0.78% W respectively in the process of transformation of austenite at the temperatures of the pearlite and intermediate regions. In the process of decomposition in the pearlite region, the contents of the alloying elements in the carbides exceed their contents in steel by a factor of 3 -- 5 times. The results obtained prove that the decomposition of the austenite in the pearlite region is connected with the need for diffusion redistribution of the tungsten. It is shown that rate of secondary diffusion

Cerd : 1/2

Category : USSR/Solid State Physics - Phase Transformation in
Solid Bodies

E-5

Abs Jour : Ref Zhur - Fizika, No 3, 1957, No 6617

is weak during the process of decomposition and for some time after the decomposition. On the other hand, prolonged soaking after the decomposition leads to a substantial diffusion redistribution of the alloying elements in the decomposition products. The decomposition of austenite in the middle region takes place without any noticeable diffusion redistribution of the alloying elements in the austenite. The need for diffusion redistribution of the alloying elements in austenite causes a considerable reduction in the speed of decomposition in the pearlite region.

Card : 2/2

Tsivinskiy, S. V.

Category : USSR/Solid State Physics - Phase Transformation in
Solid Bodies

E-5

Abs Jour : Ref Zhur - Fizika, No 3, 1957, No 6617

Author : Tsivinskiy, S.V., Kogen, L.I., Entin, R.I.

Title : Radioactive Tracer Investigation of the Distribution of
Chromium and Tungsten During the Process of Austenite Decay

Orig Pub : Probl. metalloved. i fiz. metallov, sb. 4, 1955, 277-295

Abstract : The method of radioactive isotopes was used to determine the contents of Cr and V in the carbide phase in steels with 1.18% C and 2.42% Cr and with 1.02% C and 0.78% W respectively in the process of transformation of austenite at the temperatures of the pearlite and intermediate regions. In the process of decomposition in the pearlite region, the contents of the alloying elements in the carbides exceed their contents in steel by a factor of 3 -- 5 times. The results obtained prove that the decomposition of the austenite in the pearlite region is connected with the need for diffusion redistribution of the tungsten. It is shown that rate of secondary diffusion

Cerd : 1/2

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"APPROVED FOR RELEASE: 03/14/2001

CIA-RDP86-00513R001757120013-4

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CIA-RDP86-00513R001757120013-4"

S/170/62/005/009/005/010
B104/B102

11350.

AUTHOR:

Tsivinskiy, S. V.

TITLE:

The theory of the capillary effects in application to the drawing of rods with a given cross section directly from the melt by A. V. Stepanov's method

PERIODICAL: Inzhenerno-fizicheskiy zhurnal, v. 5, no. 9, 1962, 59 - 65

TEXT: When rods of a desired cross section are produced by drawing the melt through a profile plate which does not become wet, the melted material is subjected to a certain pressure, the characteristics of which are here examined. The Laplace equation $y\rho g = \pm \sigma/R - \sigma/R_1 + p$ leads to

$$y_0 = \sqrt{\frac{2\sigma}{\rho g}(1 - \cos \alpha_0) + \left(\frac{1}{2R_1^2}\right)^2 \frac{\sigma^2}{\rho^2 g^2}} - \frac{1}{2R_1^2} \frac{\sigma}{\rho g}. \quad (12)$$

for the approximate height y_0 (Fig. 1) of the column of the melt. σ is the surface tension, ρ the density of the melt. This formula was checked with water at 18 - 20°C. A profiled rod able to become wet is plunged into the

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The theory of the capillary ...

S/170/62/005/009/005/010
B104/B102

free surface of the profile plate and then slowly removed. y_0 can be calculated with satisfactory accuracy under different experimental conditions. There are 4 figures.

ASSOCIATION: Fiziko-tekhnicheskiy institut imeni A. F. Ioffe AN SSSR, E.
Leningrad (Physicotechnical Institute imeni A. F. Ioffe
AS USSR, Leningrad)

SUBMITTED: January 25, 1962

Fig. 1. Shapes of the melt column. Legend: (1) piece (crystal); (2) liquid column; (3) plate with profile opening.

Card 2/0. 2

I 46246-66 EWT(m)/EWP(k)/T/EWP(t)/ETI IJP(c) JD/WH
 ACC NR: AP6023910 SOURCE CODE: UR/0363/66/002/007/1177/1179
 47
 46
 8

AUTHOR: Tsivinskiy, S. V.; Stepanov, A. V.

ORG: Physicotechnical Institute im. A. F. Ioffe, Academy of Sciences, SSSR (Fiziko-
 tekhnicheskiy institut Akademii nauk SSSR)

TITLE: Possibility of controlling the distribution of impurities in the preparation
 of crystals of predetermined shape

SOURCE: AN SSSR. Izv. Neorg materialy, v. 2, no. 7, 1966, 1177-1179

TOPIC TAGS: crystal growing, semiconductor crystal, crystal impurity, pn junction

ABSTRACT: The distribution of impurities in crystals of predetermined shape grown by
 the method of A. V. Stepanov was studied on the basis of the theory proposed by J. A.
 Burton, R. C. Prim, and W. P. Slichter (J. Chem. Phys. 21, 1987, 1953). It is shown
 that when a crystal is pulled from a narrow slit or a round hole of small diameter,
 the impurity becomes evenly distributed throughout the crystal if the crystallization
 front is flat and if its position with respect to the height in the slit and the pull-
 ing rate are constant. When the slit or hole is deep, the concentration of the impur-
 ity in the crystal is equal to the concentration in the melt in the crucible. By
 varying the position of the crystallization front with respect to the height, its
 form, and the pulling rate, one can obtain a predetermined nonuniform distribution of
 the impurity. In the growing of semiconductor crystals, if the melt contains two im-

UDC: 548.5

Card 1/2

L 40240-66

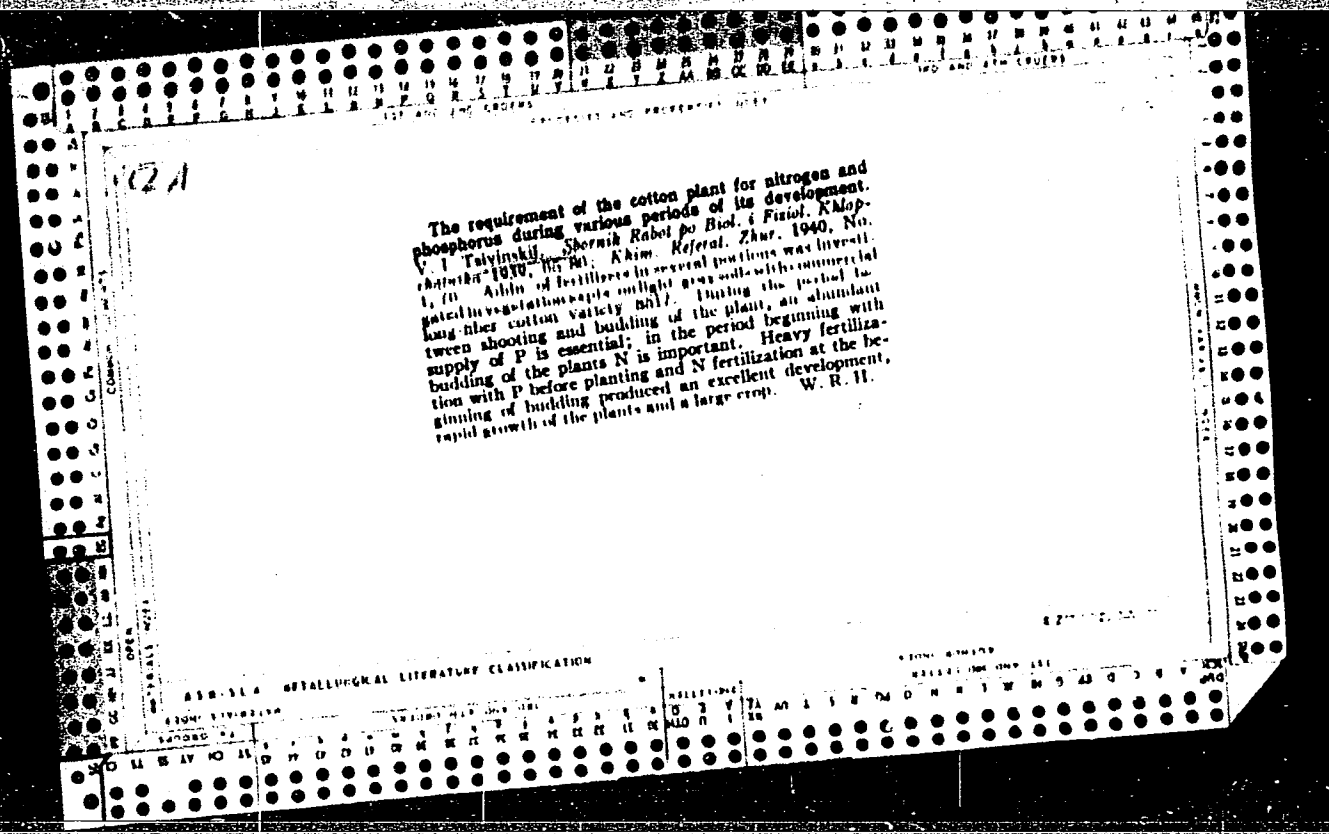
ACC NR: AP6023910

purities producing n- and p-type conductivity, p-n junctions of predetermined configuration can be obtained during the growth process. Orig. art. has: 1 figure and 1 formula.

SUB CODE: 20/ SUBM DATE: 14Oct65/ ORIG REF: 004/ OTH REF: 001

Pulling crystals from a melt /8

Card 2/2 blg



TSIVINSKIY, Ye.I. [TSyvins'kyi, Ye.I.]

Atypical course of extrauterine pregnancy shown as a type of
tubal abortion. Ped., akush. i gin. 22 no.3:3 of cover. '88.
(MIRA 14:4)

(PREGNANCY, EXTRAUTERINE)

ALABUZHEV, P.M., doktor tekhn. nauk; ZUYEV, A.K., assistant;
KUZ'MENKO, Yu.P., assistant; TSIIVINSKIY, Yu.P., aspirant

Investigating the performance of an electromechanical
spike driver. Izv. vys. ucheb. zav.; mashinostr. no.2:
144-158 '63. (MIRA 16:8)

1. Novosibirskiy elektrotekhnicheskii institut.

ALABUZHEV, P.M., prof.; VIL'NIT, L.N., starshiy prepodavatel';
KOPEYKIN, G.F., starshiy prepodavatel'; TSIVINSKIY, Yu.P., inzh.

Movement of the striker and body of an electromechanical
hammer drill with a striker-restraining mechanism. Izv. vys.
ucheb. zav.; gor. zhur. no.6:74-80 '61. (MIRA 16:7)

1. Novosibirskiy elektrotekhnicheskiy institut. Rekomendovana
kafedroy mekhaniki.
(Boring machinery)

TSIVIRAS, P.

¹⁵
TSIVIRAS, P., doc.; LUNECKAITĖ, B., asist.

On the problem of the pathogenesis and therapy of chronic
enterocolitis. Sveik. apsaug. 8 no.1:16-21 Ja'63.

1. Vilniaus Valst. V.Kapsuko v. universiteto Medicinos fakulteto
infekcinių ligų katedra. Katedros vedėjas - doc. P.Cibiras.

*

YUDOVICH, S.Z.; ROGOZA, G.D.; TSIVIRKO, D.Ye.

"Metal for sheet-metal work" by V.P.Severdenko, S.A.Pasechnyi.
Reviewed by S.Z.Iudovich, G.D.Rogoza, D.E.TSivirko. Kuz.-shtam.
proizv. 4 no.10:47 0 '62. (MIRA 15:12)

(Sheet steel)
(Severdenko, V.P.) (Pasechnyi, S.A.)

TSIVIRKO, D.Ye.; NATAPOV, B.S.

Effect of the mechanical properties of sheet steel on its
suitability for die stamping. Kuz. shtam. proizv. I no.10:1-9
0 '59. (MIRA 13:2)

(Sheet-metal work) (Steel, Automobile)

NATAPOV, B.S.; TSIVIRKO, D.Ye; FAL'KEVICH, E.S.

Effect of various factors on the quality of automobile body
sheet steel. Nauch.dokl.vys.shkoly; met. no.1:254-258 '59.
(MIRA 12:5)

1. Zaporozhskiy mashinostroitel'nyy institut.
(Steel, Automobile--Testing)

Sov/133/58-9-20/29

AUTHORS: Natapov, B. S. and Tsivirko, D. Ye.

TITLE: The Influence of Structure and Mechanical Properties of Steel 08kp on Its Stamping Ability (Vliyaniye struktury i mekhanicheskikh svoystv stali 08kp na yeye shtampuyemost')

PERIODICAL: Stal', 1958, Nr 9, pp 828-834 (USSR)

ABSTRACT: The investigation of the above problem was carried out in order to establish the relationship between the results of testing under laboratory conditions of physico-mechanical properties and micro structure of sheet steel 08kp and its actual behaviour during the stamping process. A statistical analysis of defective stampings of parts of motorcar bodies (at the Gor'kiy Automobile Plant): due to tearing was made and correlated with properties of metal. Correlation coefficients of a number of defects during stamping with physico-mechanical properties of steel - Table 1 and Fig.1; the influence of the initial mechanical properties of steel on the number of defective stampings - Table 2, and the chemical composition of respective metal deliveries in the ladle and in sheets - Table 3; frequency of distribution of mechanical properties of the individual deliveries of sheets - Fig.2; the comparison of the proportion of defects during stamping with mechanical properties of metal - Table 4; frequency

Card 1/4

Sov/133/58-9-20/29

The Influence of Structure and Mechanical Properties of Steel 08kp on Its Stamping Ability

distribution of the degree of deformation for sheets of the same thickness - Fig.3. It is concluded that: 1) Under correct technological conditions of stamping parts of motor car bodies the proportion of rejects caused by faults in the metal amounted to 70-80% of the total and due to deformation 20-30% (mainly due to incorrect pressing technology). 2) One of the main causes of tearing due to faults in the metal are laminations as well as the following deviations of mechanical properties from optimum values: a) increased toughness of metal ($\sigma_s \geq 22 \text{ kg/mm}^2$, the ratio of $\sigma_s/\sigma_B \geq 0.75$, $R_{B100} \geq 53$); b) a considerable proportion of sheets with a lowered plasticity ($\delta \leq 38$). 3) As the basic characteristics of the ability of 08kp steel to deep drawing the following should be considered: relative elongation, coefficient of work hardening or the ratio of σ_s/σ_B and absence of coarse laminations in zones of maximum deformations (at the size grain 6.6-7.7 and 8 and any combinations of the above sizes; round

Card 2/4

SOV/133/58-9-20/29

The Influence of Structure and Mechanical Properties of Steel 08kp
on Its Stamping Ability

cementite inclusions of the size 1-5 are permissible).
4) Grading of rejects on works according to tears during stamping should be carried out after an investigation of fractures in the zone of dangerous deformation and according to additional mechanical tests of sheets before stamping.
5) Limiting permissible indices of mechanical properties for each part, difficult to stamp, should be established by a cooperative investigation of metallurgical and motor car works. 6) For the control of stability of the technological process of production of sheet steel tensile tests or according to Eriksen and hardness tests. 7) In order to improve stamping ability of sheet steel it will be advantageous to decrease the yield point (ratio of σ_S/σ_B) to increase the relative elongation, to secure freedom from laminations

Card 3/4

SOV/133/58-9-20/29

The Influence of Structure and Mechanical Properties of Steel 08kp
on Its Stamping Ability

and to increase the uniformity of sheets in a delivery.
There are 4 tables, 3 figures and 12 references, of which
9 are Soviet and 3 English.

ASSOCIATION: Zaporozhskiy mashinostroitel'nyy institut (Zaporozh'ye
Machine Building Institute)

Card 4/4

NATAPOV, B.S.; VOLOSHCHUK, M.D.; LEVCHENKO, T.V.; TSIVIRKO, D.Ye.

Dependence between the mechanical properties and the microstructure
of 08KP steel. Trudy Zapor. mashinostroiv inst. 4:45-58 '59.
(MIRA 17:1)

NATAPOV, B.S.; TSIVIRKO, D.Ye.

Forgeability of 08KP steel depending on its initial properties.
Trudy Zapor. mashinostroi. inst. 4:59-79 '59. (MIRA 17:1)

NATAPOV, B.S.; BARZIY, V.K.; OL'SHANETSKIY, V.Ye.; Prinimali uchastiye:
FILONOV, V.A., inzh.; YUDIN, M.I., inzh.; IOFFE, M.M., inzh.;
POPOV, S.M., inzh.; RYBALKO, G.I., inzh.; ODINETS, L.I., inzh.;
SIGALKO, F.V., inzh.; TSIVIRKO, D.Ye.; VOLOSHCHUK, M.D., inzh.

Heat treatment of cold-rolled sheet metal. Stal' 22 no.2:163-
165 F '62. (MIRA 15:2)

1. Zaporozhskiy mashinostroitel'nyy institut i zavod
"Zaporozhstal'". 2. Zavod "Zaporozhstal" (for Filonov,
Yudin, Ioffe, Popov, Rybalko, Odinet). 3. Zaporozhskiy
mashinostroitel'nyy institut (for Sigalko, TSivirko, Voloshchuk).
(Sheet steel--Heat treatment)

GABUYEV, G.Kh.; YEL'TSOV, K.S.; SHUL'TE, Yu.A.; MIKHAYLOV, P.A.; GAREVSKIKH, I.A.;
LEYBENZON, S.A.; ~~TSIVIRKO, E.I.~~; MEDOVAR, B.I.; LATASH, Yu.V.; FRANTSOV,
V.P.; PAKHOMOV, A.I.; KAGANOVSKIY, G.P.; VOINOV, S.G.; SHALIMOV, A.G.;
KALINNIKOV, Ye.S.; SMOLYAKOV, V.P.; KOSOY, L.F.

Improving the quality of electric-slag-refined bearing steel. Stal'
24 no.7:640-642 J1 '64. (MIRA 18:1)

1. Zavod "Dneprospetsstal'", Zaporozhskiy mashinostroitel'nyy institut,
Institut elektrosvarki im. Ye.O.Patona i Tsentral'nyy nauchno-issledo-
vatel'skiy institut chernoy metallurgii imeni I.P.Bardina.

127
TELETYPE
ACCESSION NR: AP4041869

S/0133/64/000/007/0640/0642

AUTHOR: Gabuyev, G. Kh.; Yel'tsov, K. S.; Shul'te, Yu. A.; Mikhaylov, P. A.; Garevskikh, I. A.; Leybenzon, S. A.; Tsivirko, E. I.; Medovar, B. I.; Latash, Yu. V.; Prantsov, V. P.; Pakhomov, A. I.; Kaganovskiy, G. P.; Volnov, S. G.; Shalimov, A. G.; Kalinnikov, Ye. S.; Smolyakov, V. P.; Kosoy, L. P.

TITLE: Improvement of the quality of electroslag-melted ball-bearing steel

SOURCE: Stal', no. 7, 1964, 640-642

TOPIC TAGS: ball bearing steel, electroslag melted steel, high purity steel, steel electroslag melting

ABSTRACT: Several variants of electroslag melting have been tested in an attempt to improve the quality of ball-bearing steel. The analysis of electroslag-melted steel showed that nitrides and carbonitrides constitute the greatest part (up to 75%) of the nonmetallic inclusions present in the steel. These nitrides derive from the initial material. The electroslag process eliminates large nitrides over 20μ in diameter, but does not eliminate the smaller ones.
Cord 1/3

ACCESSION NR: AP4041869

Therefore, the nitrogen and titanium contents of the initial metal must be reduced to a minimum. This can be done, for example, by refining the metal in the ladle with synthetic slag. Electroslag melting of open-hearth steel refined with synthetic slag eliminated all the inclusions larger than 10 μ and reduced the number of smaller inclusions by more than 50% and the nitrogen and oxygen contents to 0.0053 and 0.0020%, respectively. To produce ultra-high purity ball-bearing steel, the double electroslag melting was applied with a combination of various fluxes. The use of ANF-6-ANF-6 fluxes in double electroslag melting or of AN-29-ANF-6 fluxes produced best results. Ultra-high purity steel, fully satisfying requirements for critical ball bearings, was obtained. Orig. art. has: 2 figures.

ASSOCIATION: Dneprospetsstal' (Dneprospetsstal' plant); Zaporozhskiy mashinostroitel'nyy institut (Zaporozh Machine-Building Institute); Institut elektrosvarki im Ye. O. Patona (Electric Welding Institute); TsNIIGhM

Cord 2/3

SMOLYAKOV, V.F.; SHUL'TE, Yu.A.; MEDOVAR, B.I.; GAREVSKIKH, I.A.;
LATASH, Yu.V.; TSIVIRKO, E.I.; ZABALUYEV, Yu.I.; TOPCHIIY, S.F.

Nonmetallic inclusions in electric slag refined 12Kh2N4A
structural steel. Met. i gornorud. prom. no.4:35-37 J1-Ag '64.
(MIRA 18:7)

KHUDYAKOVA, E.; TSIVIRKO, G.F.

Photography and cinematography serve nature. Priroda 49
no.11:123 N '60. (MIRA 13:11)

1. Gosudarstvennyy istoricheskiy arkhiv, Leningrad (for Khudyakova). 2. Leningradskiy Dom rabotnikov prosveshcheniya (for TSivirko).
(Nature photography)

VOLOSOV, David Samuilovich; ~~ASIVKIN, Mikhail Vul'fovich, dotsent;~~
~~PANFILOV, N.D., red.; MALEK, Z.N., tekhn.red.~~

[Theory and design of optical systems for projection equipment]
Teoriia i raschet svetoopticheskikh sistem proektsionnykh pri-
borov. Moskva, Gos.izd-vo "Iskusstvo," 1960. 525 p.
(MIRA 13:12)

1. Rukovoditel' laboratorii Gosudarstvennogo opticheskogo insti-
tuta im. S.I.Vavilova i kafedry fiziki i optiki Leningradskogo
instituta kinoingenerov (for Volosov).
(Optics) (Projectors)

BARBANEL', Simon Rafailovich; BARBANEL', Solomon Rafailovich; KOROLEV,
Nikolay Mikhaylovich; SOLOMONIK, Aron Vul'fovich; TSIVKIN, Mikhail
Vul'fovich; PROVORNOV, S.M., kand.tekhn.nauk, red.; EYSIMONT, L.O.,
red.; MALEK, Z.N., tekhn.red.

[Motion-picture projection] Kinoproektsionnaya tekhnika. Pod
obshchey red. S.M.Provornova. Moskva, Gos.izd-vo "Iskusstvo,"
1958. 517 p. (MIRA 12:3)

(Motion-picture projection)

TSIVKIN, M.V.

Study of the light characteristics of vision zones of the
stereoscopic screen. Trudy LIKI no.4:67-79 '56. (MLRA 10:5)

1.Kafedra fiziki i optiki.

(Motion-picture screens)

(Motion pictures, Three-Dimensional)

TSIVKIN, M.V.; PROVORNOV, S.M.

One-film polarized systems of stereoscopic cinematography.
Zhur.nauch.i prikl.fot.i kin. 2 no.2:130-135 Mr-Ap '57.
(MLRA 10:5)

1.Leningradskiy institut kinoinzhenerov.
(Motion pictures, Three-dimensional)

PROVORNOV, S.M.; TSIVKIN, M.V.

Experimental investigation of the effect of light dispersed by a stereoscopic screen on the separation and contrast of the images resulting from double projection. Trudy LIKI no.3:93-101 '55.
(MLRA 9:8)

1. Kafedra kincapparatury i optiki.
(Motion pictures, Three-dimensional)

TSIVKIN, M.V.

Determining the optimum parameters of conical lenses of a raster
for stereoscopic motion-picture projection. Trudy LIXI no.3:
110-116 '55. (MLRA 9:8)

1. Kafedra fiziki i optiki.
(Optics, Geometrical) (Motion-picture projection)

TSIVLIN, P.; CHUGUNOV, I.

Reinforced concrete elements for glass furnace framework. Stroimaterialy.
izdel.i konstr. 1 no.12:8-9 D '55. (MLRA 9:7)
(Glass manufacture) (Reinforced concrete)

TABLE OF CONTENTS (continued)

CH. 1 Method of automatic range finding of target location

Card 1/2

L 44566-65

ACCESSION NR AM5012949

Ch. II Computer & Electronic automatic range finder -- 18

Ch. III Operational characteristics of a range finder with two integrators

range finder parameters -- 160

range finder with two integrators -- 167

Bibliography -- 182

SUBMITTED: 15Oct64

SUP CODE: DC

NO REF SCV: 012

OTHER: 004

ASR
Card 2/2

ACC NR: AP7006021

SOURCE CODE: UR/0203/66/006/005/0956/0956

AUTHOR: Vinnikova, T. L.; Tsivtsivadze, M. M.; Cherevko, T. N.

ORG: Institute of Terrestrial Magnetism, the Ionosphere and Radio Wave Propagation, AN SSSR (Institut zemnogo magnetizma, ionosfery i rasprostraneniya radiovoln AN SSSR)

TITLE: Programs for computing the geomagnetic field by the spherical analysis method

SOURCE: Geomagnetizm i aeronomiya, v. 6, no. 5, 1966, 956

TOPIC TAGS: geomagnetic field, electronic computer / Ural-2 electronic computer

ABSTRACT: The accumulation of much experimental data on the geomagnetic field makes necessary the use of electronic computers for its analysis. This brief paper describes a group of programs which has been developed for use with a "Ural-2" computer for computing the geomagnetic field by the spherical analysis method. Using the programs for different heights h above the earth it is possible to compute the total vector T of the magnetic field and its components X, Y, Z , the vertical gradients $\partial T/\partial r, \partial X/\partial r, \partial Y/\partial r, \partial Z/\partial r$, and also the difference $\Delta T = T_{\text{obs}} - T_{\text{com}}$ (T_{obs} is the total vector of the observed field, T_{com} -- the computed field) for projection of the observed field onto a sphere of stipulated radius. The authors thank N. P. Ben'kovaya and L. O. Tyurminaya for setting up the problem and for constant attention. Orig. art. has: 1 formula. [JPRS: 38,937]

SUB CODE: 08, 09 / SUBM DATE: 18Jan66 / ORIG REF: 002 / OTH REF: 001

Card 1/1

UDC: 550.383

092 70803

SANADZE, V.V.; TSIVTSIVADZE, T.A.

Effect of small concentrations of cobalt on self-diffusion of iron.
Izv.vys.ucheb.zav.;fiz. no.2:206-209 '60. (MIRA 13:8)

1. Gruzinskiy politekhnicheskij institut im. S.M.Kirova.
(Iron) (Diffusion) (Cobalt)

SANADZE, V. V.; TSIVTSIVADZE, T. A.; TATRISHVILI, K. G.

Effect of weak concentrations of zirconium, niobium, and
molybdenum on the self-diffusion of iron. Izv. vys. ucheb.
zav.; fiz. no.6:38-43 '62. (MIRA 16:1)

1. Gruzinskiy politekhnicheskii institut imeni Lenina.

(Iron-niobium-zirconium alloys)
(Iron-molybdenum alloys)
(Diffusion)

KAMAY, Gil'm; TSIVUNIN, V.S.; PAPINA, L.A.

Some esters of ethyl- α -bromovinylphosphinic acid. Trudy KKHITI
no.30:11-17 '62. (MIRA 16:10)

TSIVUNIN, V.S.; KAMAY, G.Kh.; KHISAMUTDINOVA, R.Sh.; SMIRNOV, Ye.M.

Some derivatives of phenyl-B-chlorovinylphosphonic acid. Zhur.
ob. khim. 35 no.7:1231-1233 J1 '65. (MIRA 12.2)

TSIVUNIN, V.S.; KAMAY, G.I.; SHAGIDULLIN, R.R.; KHISAMUTDINOVA, R.Sh.

Reaction of the condensation of diethylchlorophosphine with
α-chloroethylalkyl ethers. Zhur. ob. khim. 35 no.7:1234-
1238 J1 '65. (MIRA 18:8)

L 26060-66 EWT(m)/EWP(j) RM

ACC NR: AP5025129

SOURCE CODE: UR/0079/65/035/010/1817/1819

AUTHOR: Kamay, Gil'm; Tsivunin, V. S.; Nurtidinov, S. Kh.

33

B

ORG: None

TITLE: On obtaining dichloro anhydride of Beta, Beta-dimethyl-vinylphosphonic acid and some of its derivatives

SOURCE: Zhurnal obshchey khimii, v. 35, no. 10, 1965, 1817-1819

TOPIC TAGS: ^{organic}phosphorus compound, phosphorus chloride, phosphorus, hydrocarbon, antimony, nonmetallic organic derivative, ester, phosphonic acid

ABSTRACT: It was indicated that in the case of decomposition of the phosphorus pentachloride complex with unsaturated hydrocarbons by elementary phosphorus (white) it was possible to obtain acid chlorides of phosphonous acids. The complex $(\text{RPCl}_3)^+(\text{AlCl}_4)^-$ was reduced by antimony. The product of the reaction of isobutylene with phosphorus pentachloride can be decomposed by antimony. Derivatives are obtained from the latter: diethyl ester of β, β -dimethylvinylphosphonic acid, diethyl ester of β, β -dimethylvinylthiophosphonic, ethyl ester

Card 1/2

UDC: 546.185.131+547.
538:547.26'118

2

L 26060-66

ACC NR: AP5025129

of ethyl-*S,S*-dimethylvinylphosphonic and ethyl *RR*-dichlorvinyl ester of
SS-dimethylvinylphosphonic acids.

SUB CODE: 07 ⁰⁷ 1 SUBM DATE: 16Oct64/ ORIG REF: 003/ OTH REF: 008

Card 2/2 *pla*

SOV/169-59-3-2941

Translation from: Referativnyy zhurnal, Geofizika, 1959, Nr 3, p 131 (USSR)

AUTHOR: Tsiyun, T.A.

TITLE: The Solar Battery,⁹

PERIODICAL: Tr. Sektsii provodn. svyazi. Ukr. resp. pravl. Nauchno-tekhn.
o-va radiotekhn. i elektrosvyazi, 1958, Nr 3, pp 118 - 125 ✓

ABSTRACT: This is a review.

Card 1/1

TSIVKIN, M.V.

Optical properties of the cone-shaped light beam path. Trudy IAN
no. 11:53-64 '64. (MIRA 1964)

1. Kafedra fiziki i optiki Leningradskogo instituta Kincanshenarow.

ACC NR: AP7012440

SOURCE CODE: UR/0413/66/000/018/0040/0040

AUTHOR: Tsivunin, V. S.; Kamay, G. Kh.; Kormachev, V. V.

ORG: none

TITLE: Method for preparing phosphorylated cyclohexenemethanals. Class 12,
No. 185909 [Announced by Kazan Chemical Technological Institute im. S. M.
Kirov]

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 18,
1966, 40

TOPIC TAGS: cyclohexane, methanol, isoprene, phosphorylation

SUB CODE: 07

ABSTRACT: A method is claimed for the preparation of phosphorylated
cyclohexenemethanals in which o,o-dialkylphosphonyldialkyl-acrylacetals
are treated with isoprene in the presence of an equimolecular quantity of
water and traces of hydrogen chloride with heating. [JPRS: 40,422]

Card 1/1

UDC: 547.594.1*241.07

0932 1392

ACC NR: AP6028899

SOURCE CODE: UR/0079/66/036/008/1430/1433

AUTHOR: Tsivunin, V. S.; Kamay, G. Kh.; Kormachev, V. V.; Ukader, G. S.

ORG: Kazan Chemical Technology Institute im. S. M. Kirov (Kazanskiy khimiko-tekhnologicheskii institut)

TITLE: Reactions of dialkylchlorophosphine with dibromoalkanes and bis(chloromethyl) ester

SOURCE: Zhurnal obshchey khimii, v. 36, no. 8, 1966, 1430-1433

TOPIC TAGS: brominated organic compound, dialkylchlorophosphine, dibromoalkane, alkylidiphosphine dithioxide, chlorinated organic compound, organic phosphorus compound, alkylphosphine, alkane, ABSTRACT:

The addition of $(C_2H_5)_2PCl$ to 1,2-dibromomethane, 1,3-dibromopropane, and bis(chloromethyl) ether was studied under various conditions and with various reagent ratios. It is shown that on boiling (on a water bath), dibromoethane and bis(chloromethyl) ether add mainly two molecules of $(C_2H_5)_2PCl$ to form the corresponding adducts. At 100—129°C, 1,3-dibromopropane adds one or two molecules of $(C_2H_5)_2PCl$ to form the corresponding mono- or diadducts. Decomposition of the adducts with alcohols, water, or H_2S yielded the corresponding compounds Ia (bp 180°C, d_4^{20} 1.1164, n_D^{20} 1.4919), Ib (bp 199—200°C),

UDC: 546.181.1+547.412

Card 1/2

ACC NR: AP6028899

IIa (mp 125—126°C), IIb (mp 8615°C), IIIa (mp 127—128°C), IIIb
(mp 81.50°C), IV (bp 153—154°C), and V (bp 91—92°C).
[WA-50; CBE No. 11]

SUB CODE: 07/ SUBM DATE: 06Sep65/ ORIG REF: 003/ OTH REF: 001/

Card 2/2

DIETHYLCHLOROPHOSPHINE WITH DERIVATIVES OF ACRYLIC AND METHACRYLIC ACIDS
 Author: Iskender, V. B.; Ananov, E. R.; Muzatullin, B. B.

Source: Iskender, V. B.; Ananov, E. R.; Muzatullin, B. B.

Card: none

Topic: Reaction of diethylchlorophosphine with derivatives of acrylic and methacrylic acids

Source: Iskender, V. B.; Ananov, E. R.; Muzatullin, B. B.

Topic: Spectrometer, alkylphosphine, acrylic, methacrylic acid /UR-10 spectrometer

ABSTRACT: The reaction of diethylchlorophosphine with derivatives of acrylic and methacrylic acid was studied. The reaction of diethylchlorophosphine with acrylic and methacrylic acids and their chlorides, followed by decomposition of the adducts with alcohols, was found to lead to the corresponding esters of diethylphosphonopropionic acids (beta-diethylphosphonopropionic and alpha-methyl-beta-diethylphosphonopropionic, respectively). The complex formation was found to proceed along the pi-pi conjugated system, rather than at the carbonyl carbon atom. The infrared spectra of the reaction products confirm their structures. The authors thank R. B. Muzatullin and E. R. Ananov for carrying out the spectral analyses on the spectrometer UR-10. Orig. art. has: 1 table. [JPRS: 33,970]

SUB CODE: 07 / SUBM DATE: 09Apr65 / ORIG REF: 003

Card 1/1

UDC: 546.181.1 + 547.391.1.3

TSIVUNIN, V.S.; KAMAY, G.Kh.; KORMACHEV, V.V.

Interaction of secondary chlorophosphines with α -chlorine-
containing ethers and sulfides. Zhur.ob.khim. no.12:2190-
2192 D '65. (MIRA 19:1)

1. Submitted January 1, 1965.

L 31802-66 EWP(m)/EWP(j) RM SOURCE CODE: UR/0079/66/036/003/0436/0442
 ACC NR: AP6021669 33
 B
 AUTHOR: Tsiunin, V. S.; Kamay, G. Kh.; Fridland, S. V.
 ORG: Kazan' Chemicotechnological Institute im. S. M. Kirov (Kazanskiy khimiko-
 tekhnologicheskoy institut)
 TITLE: Reaction of certain chlorides of pentavalent phosphorus with divinyl ether
 SOURCE: Zhurnal obshchey khimii, v. 36, no. 3, 1966, 436-442
 TOPIC TAGS: ether, phosphorus chloride, intermolecular complex, chemical decompo-
 sition, chemical reaction, reaction mechanism
 ABSTRACT: The reaction of phosphorus pentachloride, ethyltetrachlorophosphorus,
 and phenyltetrachlorophosphorus with divinyl ether was investigated. A
 complex was formed, which was decomposed with sulfur dioxide or acetic acid.
 The dichloride of beta-(alpha-chloroethoxy)vinylphosphinic acid and the
 dichloride of gamma-chlorobutadienephosphinic acid were isolated in substantial
 amounts from the reaction mass; the dichloride of beta-chlorovinyl-
 phosphinic acid and the dichloride of O-vinylphosphoric acid were isolated in
 smaller amounts. The possibility of the formation of a cyclic transition
 complex was hypothesized, and various variations of its stabilization were
 proposed. Orig. art. has: 2 tables. [JPRS]
 SUB CODE: 07 / SUBM DATE: 14Apr65 / ORIG REF: 005 / OTH REF: 001
 UDC: 547.361.2.37:546.185.131
 Card 1/1

5.362.0

AUTHORS:

Tsivunin, V. S., Kamay, Gil'm

80006

S/020/60/131/05/036/069
B011/B117

TITLE:

On the Esters of Ethyl- β -chloro-vinyl Phosphinic Acid

PERIODICAL: Doklady Akademii nauk SSSR, 1960, Vol 131, Nr 5, pp 1113-1116 (USSR)

TEXT: In contradiction to earlier statements (Ref 1), the authors came to the conclusion that from the chloride of ethyl vinyl phosphinic acid, the chloride of ethyl- α,β -dibromo ethyl phosphinic acid results by bromination. It is a product with low stability, and splits off HBr already during the removal of light fractions in vacuo and at 50°. In this way, the chloride of ethyl- β -bromo-vinyl phosphinic acid results (see scheme). The authors provide no answer to the question as to whether structure (I) or (II) is correct. They prefer structure (I) as being more likely. In this case, the halogen atom is bound to the β -carbon atom, since in this case both steric and thermodynamical factors would secure a high stability of the molecule. By a careful study of the chlorination of the chloride of ethyl vinyl phosphinic acid, it was found that in contradiction to facts stated above the chlorination product (chloride of ethyl- α,β -dichloro-ethyl phosphinic acid) was shown to be a stable product which could be distilled and separated in vacuo without decomposition. Nevertheless, the tendency to split off HCl is manifested by a high, nearly quantitative

Card 1/3

80006

On the Esters of Ethyl- β -chloro-vinyl Phosphinic
Acid

S/020/60/131/05/036/069
B011/B117

yield of the chloride of ethyl- β -chloro-vinyl phosphinic acid, if the chloride of ethyl- α,β -dichloro-ethyl phosphinic acid is catalytically dehydrochlorinated over a mixture of BaCO_3 and active carbon at $330-350^\circ$. Esters of the ethyl- β -chloro-vinyl phosphinic acid were synthesized by the authors by the usual method. The chlorination of the mentioned acid was more difficult, as was expected. The yield of the chloride of ethyl- α,β,β -trichloro-ethyl phosphinic acid was 22%. The constants of the products obtained are given in table 1. Furthermore, the polymerization of methyl, ethyl and butyl esters of the ethyl- β -chloro-vinyl and of the ethyl ester of the ethyl- β -bromo-vinyl phosphinic acid was studied by the authors at $100-150^\circ$ and in presence of 2% benzoyl peroxide. After ten days, no increase in viscosity was found. The reason for the polymerization being rendered more difficult has to be attributed, in the opinion of the authors, partly to the additional screening of the double bond by the halogen atom. In contrast to this, the polymerization rate of allyl alcohol of phosphorus-containing acids is increased by the introduction of electronegative groups. The differences became evident when 2% benzoyl peroxide, the dinitrile of 2-azo-bis-isobutyric acid (Paraphor), or diazoamino benzene were used. The allyl ester of ethyl- β -chloro-ethyl phosphinic acid became waxy already at 40° within 30 minutes, while the

Card 2/3

80006

On the Esters of Ethyl- β -chloro-vinyl Phosphinic Acid S/020/60/131/05/036/069
B011/B117

allyl ester of ethyl-vinyl phosphinic acid reached this state only after having been kept at 80° for 1 h. The results obtained with diazoamino benzene were contradictory, and this reaction is under further study. V. A. Kukhtin is mentioned. There are 1 table and 5 references, 3 of which are Soviet.

ASSOCIATION: Kazanskiy khimiko-tekhnologicheskii institut im. S. M. Kirova
(Kazan' Institute of Chemical Technology imeni S. M. Kirov)

PRESENTED: November 9, 1959, by A. Ye. Arbuzov, Academician

SUBMITTED: November 4, 1959

Card 3/3

TSIVUNIN, V.S.; GIL'M KAMAY; SULTANOVA, D.B.

Reaction between ethyltetrachlorophosphine and vinyl ethers.
Zhur.ob.khim. 33 no.7:2149-2153 J1 '63. (MIRA 16:8)

1. Kazanskiy khimiko-tekhnologicheskii institut imeni Kirova.
(Phosphine) (Vinyl ether)

TSIVUNIN, V.S.; GIL'M KAMAY; FRIDLAND, S.V.

Some derivatives of β -chloroethoxyvinylphosphinic acid. Zhur.-
ob.khim. 33 no.7:2146-2149 J1 '63. (MIRA 16:8)
(Phosphinic acid)

L 36490-66 EWT(m)/EWP(j) RM
ACC NR: AP6027081

SOURCE CODE: UR/0079/65/035/010/1815/1817

AUTHOR: Tsivunin, V. S.; Gil'm Kamay; Khisamutdinova, R. Sh.

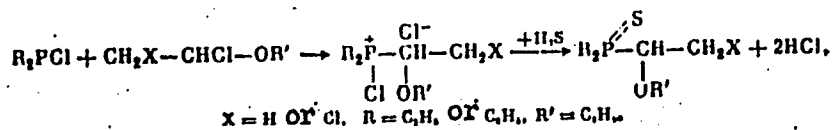
ORG: none

TITLE: Synthesis of thiooxides of diethyl(diphenyl)-alpha-(alkoxy)ethyl-phosphines,
alpha-(alkoxy)vinylphosphines, and alpha-(vinyloxy)ethyl-phosphines

SOURCE: Zhurnal obshchey khimii, v. 35, no. 10, 1965, 1815-1817

TOPIC TAGS: chemical synthesis, organic phosphorus compound, chemical decomposition,
hydrogen sulfide, chlorination, distillation, chemical bonding, bromination, hydrolysis

ABSTRACT: Study of complexing between secondary chlorophosphines
and α -chloro ethers, the authors investigated the decomposition
of the corresponding complexes with hydrogen sulfide. The overall
process is represented as follows:



As in the case of oxides, after decomposition of the complex of
diethyl(diphenyl)- α -butoxychloroethyldichlorophosphine, thermal
dehydrochlorination occurs during distillation:

Card 1/3

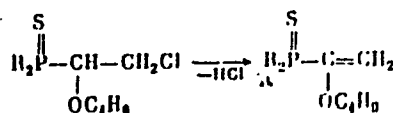
UDC: 546.185:541.49+546.221

0917

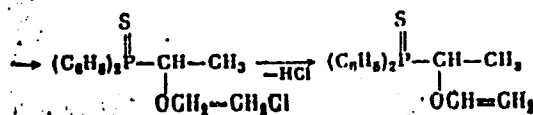
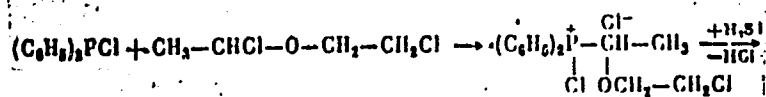
0075

L 36490-66

ACC NR: AP6027081



A similar thermal dehydrochlorination was observed as a result of distillation of the product following decomposition of the complex between diphenylchlorophosphine and α -chloroethyl B-chloroethyl ether by hydrogen sulfide. The following reaction occurred:

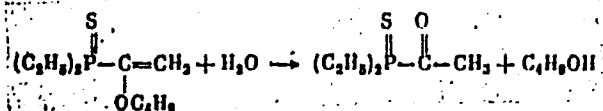


Card 2/3

L 36490-66

ACC NR: AP6027081

The presence of a double bond was confirmed by a qualitative bromination reaction. Diethyl- α -butoxyvinylphosphine thiooxide hydrolyzed readily to form diethylacetylphosphine thiooxide:



[JFRS: 36,328]

SUB CODE: 07 / SUBM DATE: 29Sep64

Card 3/3 *MLP*

TSIV'YAN S.A.

Guarantee material and equipment to plants of the R.S.F.S.R.
for continuous production. Sakh. prom. 32 no. 6:11-12 Je '58.
(MIRA 11:7)

1. Trest Sakhremsnab. (Sugar industry)